

# MILES LUCAS

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## EDUCATION

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### University of Hawai'i at Manoa

*Institute for Astronomy*

Ph.D. Astronomy

August 2019 - Present

### Iowa State University of Science and Technology

B.S. Physics, *Magna Cum Laude*

Minor in Astronomy

Minor in Computer Science

August 2015 - May 2019

Overall GPA: 3.80/4.00

Major GPA: 3.82/4.00

## PUBLICATIONS

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- [1] T. L. Campante et al. "TESS Asteroseismology of the known red-giant host stars HD 212771 and HD 203949". In: *ApJ* (Submitted).
- [2] C. Lisse, M. Sitko, and et al. (including M. Lucas). "HD 145263: Time Domain Observations of Rapid Silica Debris Disk Formation via Extreme Space Weathering". In: *ApJ* (Submitted).
- [3] D. Huber et al. "A Hot Saturn Orbiting An Oscillating Late Subgiant Discovered by TESS". In: *arXiv e-prints*, arXiv:1901.01643 (Jan. 2019), arXiv:1901.01643. arXiv: 1901.01643 [astro-ph.EP].

## EXPERIENCE

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### University of Hawai'i at Manoa

*Teaching Assistant*

August 2019 - Present

*Dr. Karen Meech*

### Iowa State University of Science and Technology

*Iowa Space Grant Undergraduate Research Fellow*

May 2017 - July 2019

*Dr. Massimo Marengo*

- Analyzing and fitting circumstellar debris disks to study planetary formation
- Developed novel statistical fitting package in python (*Starfish*)
- Applying fitting to over 90 spectra collected from NASA's Infrared Telescope Facility

### National Radio Astronomy Observatory

*NSF REU Research Assistant*

May 2018 - August 2018

*Dr. Kumar Golap, Dr. Takahiro Tsutsumi*

- Simulating and analyzing radio image data
- Developing methods to combine interferometer and single dish data
- Analyze combination methods with methodical and scientific criteria
- Create open-source package to allow any user to test their combination scheme

### Iowa State University of Science and Technology

*Undergraduate Research Assistant*

January 2017 - July 2019

*Dr. Matthew Wetstein*

- Designing and performing tests on new photodetector technology
- Designing and programming software for proprietary electronics
- Collaborating on international ANNIE neutrino research group

## TECHNICAL STRENGTHS

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<b>Computer Languages</b>	Python, Julia, C++, C, R, Java
<b>Software &amp; Tools</b>	Git, Gitlab, Github, LaTeX, Excel, Heroku, Digital Ocean, HTML, AWS, Azure

## HONORS, AWARDS, AND ACHIEVEMENTS

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Iowa Space Grant Undergraduate Research Fellow	Fall 2018-Spring 2019
NASA Astronomy Photo of the Day	July 13, 2018
Iowa Space Grant Undergraduate Research Fellow	Fall 2017-Spring 2018
College of Liberal Arts and Sciences Dean's List	Fall 2015, Fall 2016-Spring 2019
Iowa State University Aerospace Engineering "Lighter than Air" competition winner	Spring 2016
College of Engineering Dean's List	Fall 2015
Boy Scouts of America Life Scout Award	

## EXTRA-CIRRICULAR

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Member of Iowa State University Physics and Astronomy club	August 2015 - Spring 2019
Perform community outreach at Iowa State University planetarium shows	August 2015 - Spring 2019
Drummer in Iowa State University Jazz Bands	August 2015 - Spring 2019
Vice President of Theta Delta Chi Fraternity	January 2018 - May 2018
Sergeant at Arms of Theta Delta Chi Fraternity	January 2017 - January 2018
Snare drummer in Groove Drumline at ISU	Spring 2016
Snare drummer in Iowa State University College Football Varsity Marching Band	Fall 2015